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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,477	09/30/2003	Andrew R. Ferlitsch	10237.33	7527
65400	7590	07/19/2007		
KIRTON & MCCONKIE 1800 EAGLE GATE TOWER / 60 EAST SOUTH TEMPLE P.O. BOX 45120 SALT LAKE CITY, UT 84145-0120			EXAMINER MCLEAN, NEIL R	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 07/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/676,477	FERLITSCH, ANDREW R.	
	Examiner	Art Unit	
	Neil R. McLean	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:01/14/2004;10/28/2004;11/01/2004.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 20-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In claims 20-27, a "computer program" is being recited; however, a computer program would reasonably be interpreted by one of ordinary skill in the art as software, per se. This subject matter is not limited to that which falls within a statutory category of invention because it is limited to a process, machine, manufacture, or a composition of matter. Software is a function descriptive material and a function descriptive material is non-statutory subject matter.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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2. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Meilstrup et al. (US 7,233,404).

Regarding Claim 1:

In a system that includes a heterogeneous imaging device, a method for enabling the heterogeneous imaging device to operate as a homogeneous device (Column 2, line 67 – Column 3, line 4), the method comprising:

initiating an imaging job (Column 2, lines 45-47) that is compatible with an imaging driver for rendering within the system (the data in Column 6, lines 1-11 inherently need to be rendered by a driver/software);

using a virtual job control interpreter (see Printer Emulators 125, 130 and 135 in Figure 1) at the heterogeneous imaging device to render at least a portion of the imaging job, wherein the virtual job control interpreter uses a job control device profile ^{e.g.} (Column 6, lines 20-25) that is compatible with the imaging driver for mapping job control commands (The software code of the program or device which is described in Column 3, lines 59-67) into one or more internal job control actions; and

rendering the at least a portion of the imaging job at the heterogeneous imaging device (Column 5, lines 32-36).

Regarding Claim 2:

A method as recited in claim 1, wherein the heterogeneous imaging device is preloaded with a default job control device profile that is compatible with the imaging

driver (Column 6, lines 20-25).

Regarding Claim 3:

A method as recited in claim 1, wherein the job control device profile is downloaded to the heterogeneous imaging device (Column 3, lines 46-48).

Regarding Claim 4:

A method as recited in claim 3, wherein the job control device profile is based on another imaging device (Column 5, lines 63-64; and Column 6, lines 2-7).

Regarding Claim 5:

A method as recited in claim 1, wherein the job control device profile is selected at run-time for compatibility with the heterogeneous imaging device.

Regarding Claim 6:

A method as recited in claim 1, wherein the job control device profile is dynamically set to conform to another imaging device (Column 6, lines 8-11).

Regarding Claim 7:

A method as recited in claim 1, wherein the imaging job is one of:

- (i) a print job (Column 2, line 57);
- (ii) a scan job;

(iii) a fax job; and

(iv) a document management job.

Note: The claim calls for 'one of'.

Regarding Claim 8:

A method as recited in claim 1, wherein the step for using the virtual job control interpreter comprises:

parsing job control commands from the imaging job (Column 7, lines 29-35 and the software code or device which performs steps 380/385/390 and 395 in Figure 4);
and

establishing settings of the heterogeneous imaging device according to requirements specified by the job control commands (Column 7, lines 64-65 and the software code or device which performs step 475 in Figure 4).

Regarding Claim 9:

A method as recited in claim 8, wherein the step for using the virtual job control interpreter further comprises at least one of:

parsing job control commands from the imaging job (Column 7, lines 29-35 and the software code or device which performs step 440 in Figure 4);

parsing page control commands from the imaging job (Column 7, lines 64-65 and the software code or device which performs Printer Emulator in step 475 in figure 4); and

parsing page rendering commands from the imaging job job (Column 7, lines 64-65 and the software code or device which performs Printer Emulator in step 475 in Figure 4).

Regarding Claim 10:

A method as recited in claim 1, wherein the step for using the virtual job control interpreter comprises:

defining one or more capabilities of the heterogeneous imaging device (Column 3, lines 14-21);

defining capability settings associated with each of the one or more capabilities (Column 3, lines 14-21);

mapping a set of job control statements to the capability settings (Column 3, lines 14-21); and

utilizing a common definition interface to specify the capability settings and the one or more capabilities (Column 3, lines 14-21).

Regarding Claim 11:

A method as recited in claim 1, wherein the step for using the virtual job control interpreter comprises:

extracting the job control device profile embedded in the imaging job (Column 5, lines 36-40); and

using a name of the job control device profile and a name of the heterogeneous imaging device to index and retrieve the job control device profile (Column 5, lines 40-43).

Regarding Claim 12:

A method as recited in claim 1, wherein the step for initiating the imaging job is performed at a computer device that includes the imaging driver (Column 6, lines 20-25 and the software code or device which performs step 200 in Figure 2).

Regarding Claim 13:

A homogeneous imaging system comprising:

a computing device (140 in Figure 2) configured to initiate an imaging job, wherein the client (160 and 165 in Figure 1) computing device is coupled to a network (Column 4, lines 24-26);

the imaging job, wherein the imaging job is compatible with an imaging driver (Column 2, lines 45-47); and

a heterogeneous imaging device coupled to the network, wherein the heterogeneous imaging device includes a virtual job control interpreter to render at least a portion of the imaging job, and wherein the virtual job control interpreter (see Printer Emulators 125, 130 and 135 in Figure 1) uses a job control device profile ^{e.g.} (Column 6, lines 20-25) that is compatible with the imaging driver for mapping job control commands (The software code of the program or device which is described in Column

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3, lines 59-67) into one or more internal job control actions to render (Column 5, lines 32-36) the at least a portion of the imaging job at the heterogeneous imaging device.

Regarding Claim 14:

A homogeneous imaging system as recited in claim 13, wherein the heterogeneous imaging device is preloaded with a default job control device profile that is compatible with the imaging driver (Column 6, lines 20-25).

Regarding Claim 15:

A homogeneous imaging system as recited in claim 13, wherein the job control device profile is downloaded to the heterogeneous imaging device (Column 3, lines 46-48).

Regarding Claim 16:

A homogeneous imaging system as recited in claim 13, further comprising a homogeneous imaging device coupled to the network (Column 4, lines 24-26), wherein the homogeneous imaging device and the heterogeneous device are at least a part of an imaging cluster (Column 4, lines 29-33) to selectively render imaging jobs.

Regarding Claim 17:

A homogeneous imaging system as recited in claim 16, wherein the job control device profile is based on the homogeneous imaging device (Column 5, lines 63-64;

and Column 6, lines 2-7).

Regarding Claim 18:

A homogeneous imaging system as recited in claim 13, wherein the imaging job is one of:

- (i) a print job (Column 2, line 57);
- (ii) a scan job;
- (iii) a fax job; and
- (iv) a document management job.

Note: The claim calls for 'one of'.

Regarding Claim 19:

A homogeneous imaging system as recited in claim 13, wherein the computing device includes the imaging driver (Column 6, lines 20-25 and the software code or device which performs step 200 in Figure 2).

Regarding Claim 20:

A computer program product (Column 3, lines 37-41) for implementing within a computer system a method for enabling the heterogeneous imaging device to operate as a homogeneous device within the cluster (Column 4, lines 24-26), the computer program product comprising:

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a computer readable medium for providing computer program code means utilized to implement the method, wherein the computer program code means is comprised of executable code for implementing the steps for (Column 3, lines 29-36):

initiating an imaging job that is compatible with an imaging driver for rendering within the system (Column 2, lines 45-47);

utilizing a virtual job control interpreter at a heterogeneous imaging device of the system to render at least a portion of the imaging job, wherein the virtual job control interpreter (see Printer Emulators 125, 130 and 135 in Figure 1) uses a job control device profile ²³ (Column 4, line 65 – Column 5, line 3) that is compatible with the imaging driver for mapping job control commands (The software code of the program or device which is described in Column 3, lines 59-67) into one or more internal job control actions; and

rendering (Column 5, lines 32-36) the at least a portion of the imaging job at the heterogeneous imaging device.

Regarding Claim 21:

A computer program product as recited in claim 20, wherein the computer program code means is further comprised of executable code for implementing a step for downloading the job control device profile to the heterogeneous imaging device (Column 3, lines 46-48).

Regarding Claim 22:

A computer program product as recited in claim 21, wherein the job control device profile is based another imaging device (Column 5, lines 63-64; and Column 6, lines 2-7).

Regarding Claim 23:

A computer program product as recited in claim 20, wherein the computer program code means is further comprised of executable code for implementing a step for receiving the job control device profile as a selection at run-time for compatibility with the heterogeneous imaging device (Column 3, lines 29-36).

Regarding Claim 24:

A computer program product as recited in claim 20, wherein the step for utilizing the virtual job control interpreter comprises:

parsing job control commands from the imaging job (Column 7, lines 29-35 and the software code or device which performs steps 380/385/390 and 395 in Figure 4);
and

establishing settings of the heterogeneous imaging device according to requirements specified by the job control commands (Column 7, lines 64-65 and the software code or device which performs step 475 in Figure 4).

Regarding Claim 25:

A computer program product as recited in claim 24, wherein the step for utilizing the virtual job control interpreter further comprises at least one of:

parsing job control commands from the imaging job (Column 7, lines 29-35 and the software code or device which performs step 440 in Figure 4);

parsing page control commands from the imaging job (Column 7, lines 64-65 and the software code or device which performs Printer Emulator in step 475 in figure 4); and

parsing page rendering commands from the imaging job (Column 7, lines 64-65 and the software code or device which performs Printer Emulator in step 475 in Figure 4).

Regarding Claim 26:

A computer program product as recited in claim 20, wherein the step for utilizing the virtual job control interpreter comprises:

defining one or more capabilities of the heterogeneous imaging device (Column 3, lines 14-21);

defining capability settings associated with each of the one or more capabilities (Column 3, lines 14-21);

mapping a set of job control statements to the capability settings (Column 3, lines 14-21); and

utilizing a common definition interface to specify the capability settings and the one or more capabilities (Column 3, lines 14-21).

Regarding Claim 27:

A computer program product as recited in claim 20, wherein the step for utilizing the virtual job control interpreter comprises:

extracting the job control device profile embedded in the imaging job (Column 5, lines 36-40); and

using a name of the job control device profile and a name of the heterogeneous imaging device to index and retrieve the job control device profile (Column 5, lines 40-43).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Buckley et al. (US 6,798,530) teaches a system, method and graphical user interface that permits a user to define a virtual printer having a selected set of rendering options and to store that virtual printer for current or later use.

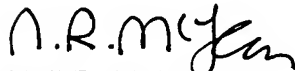
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is 571.

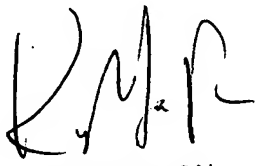
270.1679. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Y. Poon can be reached on 571.272.7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Neil R. McLean
07/05/2007


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